

B. Sc. DEGREE END SEMESTER EXAMINATION - OCTOBER 2018
SEMESTER – 3: B. Sc. COMPUTER APPLICATIONS (CORE COURSE)
COURSE: 15U3CRCAP6, OBJECT ORIENTED PROGRAMMING IN C++

(For Regular 2017 Admission and Supplementary / Improvement 2016 & 2015 Admissions)

Time : Three Hours

Max. Marks : 75

PART A

Answer **all** questions. Each question carries **1** mark.

1. What is the difference between variable declaration and definition?
2. What is the order of the object destroyed in memory?
3. What is abstraction?
4. What is namespace?
5. What is Copy constructor?
6. What is the data type is used to store the Boolean value?
7. What is an abstract class?
8. What is the remainder for $5.0 \% 2$?
9. What is an Inline function?
10. What is this pointer? (1 x 10 = 10)

PART B

Answer **any eight** questions. Each question carries **2** marks.

11. Explain the structure of a C++ program.
12. Define the memory management operators with example.
13. Define polymorphism.
14. What are manipulators?
15. What is the difference between break and Continue statement?
16. List the operators that cannot overloaded.
17. What is the use of Scope Resolution Operator?
18. Describe the syntax of the single inheritance.
19. What is the role of protected, public and private access specifier?
20. Explain the different data types available in C++. (2 x 8 = 16)

PART C

Answer **any five** questions. Each question carries **5** marks.

21. Write a program to find the volume of cube, cylinder and rectangle box using function overloading?

22. Explain Parameterized constructor and Dynamic constructor with an example.
23. What is operator overloading? What are its uses?
24. What are the special characteristics of a constructor and destructor with example?
25. Define a class string and overloaded '==' operator to compare two strings
26. Explain polymorphism with suitable example. Which are the two types of polymorphism?
27. Write a program to demonstrate the single, multiple & multi-level inheritance.

(5 x 5 = 25)

PART D

Answer **any two** questions. Each question carries **12** marks.

28. What do you mean by Static data member and static member function of a class? Explain the characteristics of a Static data members and Static member function?
29. Explain exception handling in C++ with try throw & catch. Give an example.
30. Write a menu driven program to overload the '+', '*' and '-' operator for two matrix.
31. Create two classes DM and DB which stores the value of distances. DM store distance in meter and centimeters and DB store distance in feet and inches. Write a program to add one object o DM with one object of DB using a friend function. The display should be in the format of feet and inches or meters in centimeters depending on the object on display.

(12 x 2 = 24)
